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10 October 1979

# Worldwide Report

NUCLEAR DEVELOPMENT AND PROLIFERATION

No. 13

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FOREIGN BROADCAST INFORMATION SERVICE

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## NUCLEAR DEVELOPMENT AND PROLIFERATION

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ARGENTINE NUCLEAR PROGRAM TERMED 'AMBITIOUS' BY CANADIAN MINISTER

Buenos Aires Domestic Service in Spanish 1030 GMT 17 Sep 79 PY

[Text] Michael Wilson, Canadian minister of state for international trade, stated on his arrival in the country that the Argentine nuclear plan is an ambitious program considering the needs of our country. He mentioned four new reactors in addition to the two already purchased. We hope to continue this cooperation with Argentina, the Canadian minister added.

On arrival at Ezeiza International Airport, Wilson explained that his visit responds to two essential objectives: To meet with Argentine ministers and officials to discuss and explain the Canadian offer of atomic energy for a new reactor [as heard] and to discuss general bilateral economic relations.

Asked about the scope of Canadian support to the country, he stated that it includes the group of proposals presented by Canadian companies for the construction of a heavy water plant for nuclear reactors, and other activities related to the Argentine nuclear program.

The Canadian minister also stated that this is the first visit of a Canadian official to Argentina since the new conservative government took office, and he hopes to find support not only at the government level but in the private sector as well, indicating that there is a good possibility for economic cooperation between Argentina and Canada.

Wilson was welcomed at the airport by the Canadian ambassador to Argentina and the Argentine ambassador to Canada, Dwight Fulford and Esteban Takacs, respectively, in addition to Rear Adm Carlos Castro Madero, president of the National Atomic Energy Commission, and officials of the Trade Secretariat.

CSO: 5100

## WORLDWIDE AFFAIRS

### CANADIAN SUPPORT FOR ARGENTINE NUCLEAR PROGRAM

Buenos Aires NOTICIAS ARGENTINAS in Spanish 1445 GMT 17 Sep 79 PY

[Text] Buenos Aires, 17 Sep (NA)--Esteban Takas, Argentine ambassador to Canada, stated this morning that the visit which Michael Wilson, Canadian international trade minister, is making to Argentina is "clear proof" of the decision of the Ottawa government to support the proposal made by a Canadian enterprise for the installation of a nuclear reactor and a heavy water plant in Argentina.

Takas made this statement on the radio program, "Belgrano Show", which is broadcast by Radio Belgrano. About his presence in Buenos Aires, he said that he had come to Buenos Aires because he thought "it was of mutual interest for everybody to be present at a time like this." He added that Wilson's presence in Argentina "clearly shows the decision of the Canadian Government to support the proposal which the Canadian atomic organization has made to the Argentine Atomic Energy Commission." He noted that "what is important is that we are witnessing a clear decision by two governments to support and participate in a cooperation program in support of the Argentine nuclear program."

About the interest shown by the FRG in also taking part in this program, Takas said that the reactor which is being installed in Embalse, Cordoba, is of the Candu type, of Canadian origin, "for which Argentina signed an agreement several years ago."

In any event, he noted, "this is a new stage. This is a truly ambitious program, and it is also another possibility for Canada to continue participating in this program." He did not attribute much importance to the attitude demonstrated by unions at the Canadian port of St John which impeded the shipment of heavy water to Argentina. He stated: "This was a completely insignificant movement promoted by a union in St John. The movement ended in 48 hours and there have been practically no other movements of this kind."

CSO: 5100

## CANADIAN-ARGENTINE NUCLEAR COOPERATION DISCUSSED

Buenos Aires NOTICIAS ARGENTINAS in Spanish 2318 GMT 18 Sep 79 PY

[Excerpts] Buenos Aires 18 Sep (NA)--The Canadian minister of foreign trade, Michael Wilson, told President Jorge Rafael Videla tonight of his government's intention "to continue efforts to strengthen our cooperation in the nuclear field," bilateral trade, and industrial cooperation.

The minister said, "I would be happy if we could reach some kind of basic agreement to turn this objective into a reality. It is very important, however, that we lay the foundation carefully before we have a ministerial meeting: I think we could send to Argentina a delegation of government officials, including experts on each priority sector, who, together with Argentine officials and experts, could identify those sectors where Argentina's needs can be practically related to Canadian capabilities."

Minister Wilson made these remarks during a lunch given in his honor at the Army Club by the Argentine Council of International Relations.

The Canadian minister asserted that "there is no country in the world that is technologically self-sufficient," and "this means a special challenge for countries like Argentina and Canada." He added, "neither of the two countries can be a master of all technologies at the same time: We need a basic technology sufficiently adapted to our industry so we can develop in our own countries that technology we receive from other countries."

Wilson stated that in Canada "there is great concern, as there is everywhere, over the danger posed by nuclear proliferation." In that regard, Canada "has felt encouraged by efforts made in Latin America through the Tlatelolco Treaty to create a region free of nuclear arms."

He said, "we consider Argentina our partner, not only regarding our national program, but also in the accomplishment of a common goal, which is to promote the responsible use of nuclear energy in our countries."

Minister Wilson also pointed out that "some criticisms were heard regarding the amendments introduced by Canada to its safeguards policy as a result of an explosion of a nuclear device in India."

He stressed that the Canadian nuclear policy was modified in 1974 and 1976 "to authorize Canadian exports to those countries having international commitments to nonproliferation and to those accepting international safeguards for their complete fuel cycle."

WORLDWIDE AFFAIRS

COMMENTATOR SEES USSR AS ARGENTINE WEAPONS SUPPLIER

PY051705 Sao Paulo Radio Bandeirantes Network in Portuguese 1000 GMT 5 Sep 79 PY

[Newton Carlos commentary]

[Text] Although it may not seem so, this is true. An Argentine military delegation has left for the Soviet Union. The delegation is headed by a general of the Argentine regime. They departed following the visit to Buenos Aires of a Soviet delegation whose members heard the Argentine army commander stress the high degree of friendship between the two countries: Argentina and the Soviet Union.

There are common interests and contradictions at play. Since 1977, the Soviet Union has surpassed the United States as Argentina's most important trade partner. It purchases more from Argentina than any other country.

With the new U.S. policy concerning human rights in Argentina, the supply of weapons to the Argentine Armed Forces has been (?suspended); the supply of weapons from the United States, that is.

Meanwhile, the Soviet Union is beginning to enter the Latin American weapons market. It has already sold tanks, aircraft and [word indistinct] to Peru, and it will surely try to convince the Argentine military delegation. Argentina, as the second purchaser will have to pay their weight in gold for the weapons.

This means that ideological questions are on the wane in this world of persistent dispute.

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## WORLDWIDE AFFAIRS

### CASTRO MADERO DENIES FRG OFFERED TO SELL FOUR REACTORS

PY052118 Buenos Aires NOTICIAS ARGENTINAS in Spanish 1505 GMT 4 Sep 79 PY

[Text] Cordoba, 4 Sep (NA)--Rear Adm Carlos Castro Madero, chairman of the National Atomic Energy Commission (CNEA), denied rumors of the presumed FRG offer to sell Argentina four nuclear reactors.

In statements made last night after a visit to the powerplant being built in Embalse Rio Tercero and before returning to Buenos Aires, Castro Madero said that "the FRG economy minister" who has just visited our country "only wanted to support the proposal made by the Kraftwerk Union for the installation of the Atucha II nuclear plant."

Castro Madero also pointed out the importance the construction of a "turn key" heavy water plant has "since it will allow future plants to operate on locally manufactured heavy water" thus cutting "the dependency Argentina has in this regard."

On the other hand, he rejected the idea of constructing a new cyclotron "although the present one's useful life is running out."

Castro Madero announced that Argentina has acquired a 20 million volt accelerator for heavy ions, which will allow the country to increase its nuclear investigation capacity, such as solid state physics and in studying the damage caused by radiation.

Finally, he pointed out that his visit to the Embalse Rio Tercero plant was to "identify possible problems which could hinder the construction of the plant and to take the necessary corrective measures that will hasten construction so that it may be operational in March 1982 as scheduled."

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## WORLDWIDE AFFAIRS

### BRIEFS

ROMANIA-ARGENTINA NUCLEAR AGREEMENT UPDATE--Buenos Aires, 17 Sep (AFP)-- A Romanian delegation arrived here today for the purpose of updating the agreement on nuclear energy signed with Argentina in 1972. The delegation is headed by Corneliu Mihulecea, head of the Romanian State Committee for Nuclear Energy; Alecu Marian, Flutor Dan and Popa Petru, all nucleo-electric energy technicians. Visits to the nuclear plants set up in the capital and Ezeiza area, 30 km south, to the Atucha nuclear plant and the plant being built in Embalse Rio Tercero in Cordoba Province, [figure indistinct] north of Buenos Aires are scheduled during their visit to the country. The Romanian delegation, which will stay in the country until the end of this week, was met by Rear Adm Carlos Castro Madro, chairman of the National Atomic Energy Commission (CNEA), and by Gheorghe Apostol, Romanian ambassador to Argentina. [Text] [Paris AFP in Spanish 0432 GMT 18 Sep 79 PY]

CANADIAN-ARGENTINE NUCLEAR PLANT SALE--Buenos Aires, 19 Sep (AFP)-- Canadian Trade Minister Michael Wilson said here today that Argentina can purchase a third nuclear reactor and a heavy water plant from Canada without ratifying the Tlatelolco Treaty on the nonproliferation of nuclear weapons in Latin America. He said that the two countries could sign a bilateral agreement, adhere to an equivalent international agreement or Argentina could agree to the nuclear nonproliferation treaty. The Canadian minister said he was satisfied with the meetings he held with Argentine President Jorge Videla, with Economy Minister Jose Alfredo Martinez de Hoz, with other government officials and with Argentine private businessmen. He noted that one of the objectives of his visit was to support the offer made by a Canadian enterprise to participate in the Argentine nuclear program. He said that the offer made by the Canadian enterprise was more advantageous than that of the FRG in its technical and economic aspects. According to the Argentine Nuclear Energy Commission, the cost of the Canadian proposal totals \$1.07 billion, while that of the FRG proposal totals \$1.57 billion. [Text] [Paris AFP in Spanish 0036 GMT 20 Sep 79 PY]

CSO: 5100



## AUSTRALIA

### AUSTRALIA REQUESTS LISTING AS URANIUM ENRICHMENT PROCESSOR

Hong Kong AFP in English 0330 GMT 26 Sep 79 OW

[Text] Canberra, September 25 (AFP)--Australia has asked the International Atomic Energy Agency for a listing as a potential uranium enrichment processor.

Although it will not be until 1990 that world enrichment capacity will be needed, in the Australian government's opinion, the Deputy Prime Minister Mr Doug Anthony is undertaking feasibility studies on establishment of an enrichment plant in Australia. Mr Anthony wants Australia therefore to be included among enrichment centres.

Australia is still in the middle of a political argument about mining uranium with the union movement resolving to prevent mining and the political parties divided on detail. The Fraser government however is determined to press forward with uranium mining.

Mr Anthony's request to the International Atomic Energy Agency is on the assumption that economic necessity will convert majority opinion in Australia to support mining.

CSO: 5100

AUSTRALIA

SOUTH AUSTRALIA CONSIDERS BUILDING URANIUM ENRICHMENT PLANT

Melbourne Overseas Service in English 1130 GMT 20 Sep 79 OW

[Text] The new liberal government in South Australia is considering permitting the building of a uranium enrichment plant. The South Australian Energy Minister, Mr(Goldsworthy), said today that a report which had been prepared for the previous labor government but suppressed was optimistic about the establishment of an enrichment plant in the state. He said the report which had been prepared in 1978 would be updated for possible release to the public.

Meanwhile, the South Australian government planned to invite a representative of one of the world's major uranium enrichment organizations (Urenco Syntac) to Adelaide for discussion, Mr (Goldsworthy) said construction on the plant could start next year with about 450 people employed during the building period.

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INDIA

GANDHI'S NUCLEAR POLICY: NO BOMBS; EXPERIMENTS CONTINUE

BK101616 Hong Kong AFP in English 1523 GMT 10 Sep 79 BK

[Text] New Delhi, 10 Sep (AFP)--Former Prime Minister Mrs. Indira Gandhi today said that her Congress Party (Indira faction), if returned to power in the forthcoming elections, would continue its nuclear policy of not manufacturing bombs but would make "whatever experiments" necessary in the national interest.

She told reporters in Bombay: "Your policy has always been quite clear. It is not our policy to make bombs, but to make whatever experiments we consider necessary in the interest of our country. It does hold good, whatever other countries feel."

India conducted its first and so far the last underground experimental blast during Mrs. Gandhi's government in 1974. The Janata government, which succeeded it, ruled out even such peaceful explosions. Present caretaker Prime Minister Charan Singh, however, declared last month that if necessary India would reconsider its entire peaceful nuclear policy in the event of Pakistan producing bombs.

CSO: 5100

JAPAN

## FIRST ENRICHED URANIUM PLANT IN OPERATION

Tokyo KYODO in English 0835 GMT 12 Sep 79 OW

[Text] Wanyotoge, Okayama Pref., Sept 12 KYODO--Japan's first pilot plant using centrifugal separators to produce enriched uranium for nuclear power reactors started operation Wednesday here, marking a major step towards domestic production of most of nuclear fuel needed.

The plant which now has 1,000 separators will have 7,000 of them when it goes into full operation in October 1981, according to an official of the Power Reactor and Nuclear Fuel Development Corp. The facility will be able then to annually produce enriched uranium enough for operating a 500,000-kilowatt nuclear power plant.

Enriched uranium is used in light-water nuclear power reactors, the dominant type in Japan and other countries.

The public corporation, which operates the plant, spent yen 45 billion (dollar 200 million) on a nine-year project to become the world's eighth country capable of manufacturing enriched uranium, the official said.

Japan has been totally dependent on imported enriched uranium, about 3 per cent of which is energy-packed uranium 235. Raw uranium ore contains only 0.7 per cent of uranium 235.

The enriched nuclear fuel, that will come out of the plant in December, will be used in the first Japanese-made nuclear reactor Fugen. The uranium ore was mined near the plant.

The nuclear enrichment technology, considered crucial to develop nuclear bombs, is highly classified and is placed under international surveillance. The corporation did not disclose, for example, how fast the separators rotate per minute, an important indicator of efficiency and economic performance of the system.

The plant opening ceremony was attended by Iwazo Kaneko, director general of the Science and Technology Agency.

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JAPAN

## FUKUI PREFECTURE TO HOLD NUCLEAR DISASTER TRAINING

Tokyo KYODO in English 0205 GMT 10 Sep 79 OW

[Text] Fukui, Sept 10 KYODO--The Fukui prefectural government will carry out a disaster training against a hypothetical nuclear power plant accident next month for the first time ever. The Fukui prefectural government is negotiating with the Science and Technology Agency and the Ministry of International Trade and Industry concerning participation of nuclear experts from the central government in the training.

The training is to be carried out at the strong request of residents of the prefecture, where many atomic power plants are located, following the radioactive leakage accident at the Three Mile Island atomic power plant in the United States last March. However, the local prefectural government has no plan to hold an evacuation drill in the coming exercise.

A fire drill was carried out at the spent nuclear fuel reprocessing plant at Tokai, Ibaraki Prefecture, in 1971, but no drill has been so far held against a radioactive accident. The prefectural government is studying the possible scope of an atomic power plant accident for the training exercise. The simulation is likely to cover only prompt reporting on the outbreak of a radioactive leak and a monitoring of leakage.

If the negotiation reaches agreement, the Science and Technology Agency plans to make a simulated emergency call to a team of nuclear experts in Yuzeno-Shima, Tokyo, and dispatch it to Obama, Fukui Prefecture, by Self-Defense Force jet helicopter.

CSO: 5100

JAPAN

BRIEFS

NUCLEAR POWER SAFETY BUREAU--Tokyo, Sept 11 KYODO--The Natural Resources and Energy Agency plans to set up a Nuclear Power Safety Bureau to assure the safety of nuclear power plants. The move is aimed at easing growing apprehensions over nuclear power plant operations in the wake of the accident in Pennsylvania's Three Mile Island nuclear power plant in March. The new bureau will consolidate three offices in the agency's Public Utilities Department--the Nuclear Power Safety Examination Division, Nuclear Power Safety Administration Division and Nuclear Power Operating Administration Office. The Science and Technology Agency has set up the Nuclear Safety Bureau. [Text] [Tokyo KYODO in English 0223 GMT 11 Sep 79 OW]

CSO: 5100



# NUCLEAR ENERGY ONLY ALTERNATIVE

Lahore THE PAKISTAN TIMES in English 21 Aug 79 p 1

[Text] Islamabad, Aug 20: Mr Munir Ahmed Khan, Chairman of the Pakistan Atomic Energy Commission, has said the Third World countries require large inputs of energy at an increasing rate for developing their industrial infrastructure and improving their economic situation at a time when energy costs have become extremely high and energy scarcity looms over the horizon.

Speaking at the European Nuclear Conference in Hamburg recently, the PAEC chief said over the last decade the less developing countries had been showing keen interest in the exploitation of nuclear energy for peaceful uses but so far only a few among them had succeeded in actually building and operating nuclear power plants.

The growth of nuclear power in less developing countries, he added, was restricted by a number of domestic and international constraints besides technical, economic and social factors.

Mr Munir Ahmed said developing countries were left with only one viable alternative--nuclear energy which today with all its limitations and hazards offered the most practical means for reasonable fossil fuel supplies. It was estimated that the total installed nuclear capacity in developing countries during 1980-89 would be about 160,000 mw to meet their bulk power needs.

While giving an analysis of the energy picture of Third World countries, Mr Munir Ahmed focused attention on some of the major problems faced by them and offered some suggestions.

CSO: 5100

## PAKISTAN

### HAQ NAK'S STATEMENT IN PRG ON USE OF NUCLEAR POWER

LDO91906 Hamburg DPA in German 1631 GNT 9 Sep 79 LD

[Text] Kronberg--General Mohammad Ziaul Haq, the president of Pakistan, said in Kronberg (Taunus) on Sunday that the top Pakistani leadership has no intention of producing an atomic bomb or other nuclear weapons. He described reports to the contrary as the product of a "western press influenced by Israel." Ziaul Haq made a stopover at the spa on his return from the conference of nonaligned states in Havana and had a meeting with Heinz-Herbert Karry, the deputy premier of Hesse, and business representatives.

The general pointed out that Pakistan has been put in a position to manufacture nuclear weapons only through the reprocessing plant for nuclear fuel wastes that was contractually agreed to with France in 1976. Under American pressure, however, the supply contract signed with France has not yet been implemented. However, the president did accord a central role in future domestic policy to Pakistan's atomic program for the peaceful use of nuclear energy. He said that this program is more important than the holding of general elections, which cannot eliminate the country's economic difficulties.

About 200 Pakistanis demonstrated in Kronberg against the "power of the generals in Pakistan." The demonstrators chanted and distributed leaflets demanding the holding of general, free elections and the release of all political prisoners in their homeland. The social-democratic Pakistani organizations that called the demonstration claimed that there are 50,000 political prisoners in Pakistan.

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## BRIEFS

NUCLEAR TECHNOLOGY PROPOSAL--Pakistan has proposed that the nonaligned summit conference make a strong call for the transfer of nuclear technology from the developed to the developing countries. The proposal was put forward in the Political Committee of the summit conference which is considering the draft declaration circulated among members of the host government. ASSOCIATED PRESS OF PAKISTAN, quoting sources close to the Pakistani delegation, says that since the draft on arms reduction was not strong enough, Pakistan has proposed amendments to the paragraphs dealing with transfer of nuclear technology, establishment of nuclear weapons free zones and security guarantees to nonnuclear states. [Excerpt] [Karachi Overseas Service in Urdu 0800 GMT 2 Sep 79 BK]

CSO: 5100

GOVERNMENT PRESSED FOR NUCLEAR PLANT DECISION

Manila PHILIPPINES DAILY EXPRESS in English 4 Sep 79 pp 1,6

[Article by Monica Ferial]

[Text]

**OFFICIALS** of the National Power Corp. headed by its president, Gabriel Y. Itchon, met yesterday to consider whether to terminate the contract for the nuclear power plant now, or wait until January when a US court is expected to hand down a yes or no verdict on the export license appeal of Westinghouse Electric Corp., the contractors of the \$1.1 billion Bataan plant.

With the recent US court decision rejecting Westinghouse's plea for the immediate release of its license to export nuclear reactor components to the Philippines, the Philippines' first nuclear power project is now in that critical stage, hovering between life and death. Stressing the complexity of the problem, Itchon said he may extend the observation period of the case to Sept. 28 when the US State Department announces its formal position on the matter.

...

**THE DECISION** is an important one. The nuclear power project was conceived to supply the projected

energy requirements of Luzon by 1984-85. Adding 620 more megawatts of electric power to the Luzon Grid, which the nuclear plant would have provided, is a "must" for NPC. If the nuclear project cannot meet its July 1983 deadline, the NPC will have to rush another type of power plant, possibly a coal-fired one, to keep pace with national requirements.

The nuclear plant has a nine month headstart, according to Itchon. If the delays caused by the export license controversy as well as our own public review of the safety of the project exceed nine months, an alternative project must be rushed. Construction at the Bataan plant site was suspended last June and the US regulatory authorities say they "may" have a decision by January at the earliest. Therefore, a minimum delay of eight months is already clear.

...

**WHILE KEEPING** his fingers crossed on the continuation of one

of the NPC's most ambitious and most expensive projects Itchon said they are surveying the Bicol area and Batangas for a possible site of a coal-thermal power plant.

Several alternatives are being considered. One, to hope for the release of the export license in January and the resolution of the safety questions. Second, cancel the Westinghouse contract now and shop around for nuclear reactor equipment from France or Germany. And third, cancel the contract with Westinghouse and abandon the nuclear power project altogether.

...

**MANY CONSIDER** the first alternative unrealistically optimistic. However, the US authorities recently released the export license for non-nuclear components including nuclear-related equipment such as storage tanks for nuclear wastes, pipes for the reactor system and others. President Carter has also expressed concern that the export license issue will affect relations with the Philippine government. The US is committed to act as a reliable supplier to nuclear technology to signatories to the treaty of the non-proliferation of nuclear weapons. The Philippines is one of these signatories.

Basic nuclear reactor equipment which are already being manufactured, however, are frozen from export because of reports that the plant is situated near several geological faults and volcanic vents. The US authorities reportedly said they were concerned over the safety of American residents in the Philippines. The American naval base in Subic is only 16 kms away and Clark Air Base in Pampanga is 100 kms away from the plant site.

Despite a plea from the Philippine Atomic Energy Commission last Aug. 6 to the US Nuclear Regulatory Commission for the release of the

export license for the Bataan nuclear equipment, assuring it that the project has passed Philippine safety standards, US authorities ruled that the USNRC could conduct its own assessment before action is taken.

Westinghouse still hopes that a favorable recommendation from the Philippine hearing commission headed by Justice Minister Ricardo Puno may yet convince US authorities to give them an export license. Others, on the other hand, feel the decision is entirely in the hands of the US.

...

**THE ALTERNATIVES** involving the cancellation of the Westinghouse-NPC contract involves complex problems. There is the outstanding question of the loan. NPC has already spent some \$420 million thus far. The NPC is losing at approximately \$1 million a day, including interest payments. Another \$3 to 4 million is committed to US-manufactured reactor equipment. A possible cancellation fee, estimated at \$70 million may have to be paid to Westinghouse if the contract is terminated. Then there is the need for more money to either resuscitate the same project or start another type of power plant to meet the 1983 deadline.

Itchon said this is the most difficult predicament he has encountered.

...

**MEANTHILE**, the on-going public hearings on the safety of the Bataan nuclear plant at the Philippine International Convention Center are nearing an end. Opposition panelists will be presenting their dissertations this week.

Justice Conrado Vasquez, acting commission chairman in Puno's absence, said the hearings may wind up this week. The commission will then review all the evidence.

# NATIONWIDE SEARCH FOR URANIUM UNDERTAKEN

Manila PHILIPPINES DAILY EXPRESS in English 30 Aug 79 p 6

[Article by Antonio Ag. Torres]

[Text]

**THIS YEAR** until 1988, the government is to undertake a nationwide survey of prospective uranium areas covering 102,000 square kilometers.

Uranium is a heavy, white, radioactive-metallic element. It is a principal source of radium and one of its isotopes, or variation is the fuel that generates atomic energy.

The 10-year search for the metal, which includes radiometric, geochemical and airborne surveys, is a part of measures adopted by the government to make the Philippines self-reliant in its energy needs by tapping local sources of fuel.

Areas with potential uranium deposits are Isabela, Tarlac, Bulacan, Mindoro, Masbate, Panay, Leyte, Cebu, Palawan, Negros, Zamboanga del Sur and Cotabato.

**THE MINISTRY** of Energy said Davao Oriental and Ilocos Norte need further exploration after initial radiometric surveys conducted in these provinces showed the presence of uranium.

Object of the survey is a total potential of 8,000 tons of uranium although detailed exploration work has yet to prove this.

Samar and Camarines Norte have

been identified by the Bureau of Energy Development to be uranium-bearing areas. The bureau said Samar has an estimated potential of 2,000 metric tons of uranium, with Bagacay being the richest source.

The bureau reported that current drillings in the Larap, Davao and Dumaco mines in Camarines Norte have shown fair chances of increasing the reserves of 300,000 metric tons of uranium-bearing ore, equivalent to 200 metric tons of uranium.

**THE EXPLORATION** for uranium in the country is tied up with the government's decision to put up a nuclear power plant in Marong, Bataan, which is projected to become operational in 1982.

It said that for the country to be able to meet its uranium needs in the next five to 10 years, it has to explore more deposits including those lower grades.

The ministry stressed that based on recent supply-demand studies, much of the world's uranium resources needed to support projected annual output will have to be dug underground, apart from



those now being mined.

THAT THE Philippine uranium survey is a feasible one is evidenced by Australia's offer to extend assistance in the development of the country's uranium resources, the ministry added.

Early next year, Getty Mining and Benguet Consolidated Mines will conduct an airborne survey over 250,000 hectares in Bicol under a one-year government permit, according to the ministry.

Energy officials said the survey will mark the first entry of the private sector in uranium prospecting in the country. If results are positive, the government may award the two mining firms with a service contract for a more extensive and detailed exploration of the area.

• • •

THE 1979 survey is programmed by the ministry to be netting 10,200 square kilometers annually up to the 10th year (1988) for a total of 102,000 sq. kms.

Currently being analyzed by government experts are 100 water and stream sediment samples collected from 7,000 sq. kms. in the Ilocos region, after geochemical and airborne surveys were initiated by the Philippine Atomic Energy Commission, PNOC-Energy Development Corp. and BED.

The ministry is recommending further probing into the promise of a big mining company in Samar, the Bagacay mine, after a survey of various copper for possible association of trace uranium mineral indicated the presence of uranium on samples taken from the main ore body. - (NMPC)

## SOUTH KOREA

### BRIEFS

NUCLEAR WASTE DISPOSAL PROJECT--Seoul, 2 Oct (HAPTONG)--South Korea was reported today receptive to the idea of a joint disposal of spent fuel with the U.S., Japan, Taiwan and the Philippines. The idea has recently been suggested by Washington as part of its efforts of nuclear non-proliferation. A foreign ministry source said the Carter administration has recently proposed to South Korea talks aimed at discussing joint disposal of spent fuel with the Pacific nations. He added the government was willing to accept the American suggestion in line with its policy of peaceful use of nuclear energy and of supporting nuclear non-proliferation. The source said consultations were underway among the ministries concerned including the science and technology ministry to map out the government's position for the proposed talks. He also said the proposed talks would center on the issue of constructing a storage facility for spent fuel. [Seoul HAPTONG in English 0128 GMT 1 Oct 79 SK]

CSO: 5100

## INTERNATIONAL AFFAIRS

### 'APN' COMMENTATOR VIEWS CEMA STEPS TO AVERT ENERGY PROBLEMS

LD051415 Yerevan KOMMUNIST in Russian 17 Aug 79 p 3 LD

[Article by APN political observer V. Begishev under the rubric "Socialist Integration in Action": "The CEMA Countries' Energy Resources"]

[Text] A certain tension in the fuel and energy balance which has arisen in recent years in a number of European CEMA countries is no secret but that does not provide grounds for talking about the development of some kind of "crisis" situation. Energy is undoubtedly becoming more expensive, and this has to a significant extent given rise to recent measures to regulate retail prices--measures adopted in most countries in the region. But there is every reason to suppose that it is a question of temporary steps and that in the not too distant future the problem will be resolved in a fundamental way.

Let us note first of all that the story about the increasing scarcity of energy sources in the socialist world--a story which has recently been propagandized zealously in the West (particularly in CIA reports, and then seized on by the mass information organs)--is refuted by the facts. Not only is the extraction of energy raw materials growing (for instance, in our country in the first 6 months of this year 3 percent more oil and gas condensate and 9 percent more natural gas were extracted than in the same period last year), but the geological base of the fuel extracting industry is also expanding. Thus in the European CEMA countries in 1966-1975 alone 147 oil and gas deposits were discovered--not major deposits, but creating a notable reserve in total. In the Soviet Union 44 such deposits were discovered last year alone. And this is despite the fact that certain promising territories and sea areas (Western Siberia, for instance, or the northern and eastern sea shelves) have still been studied only slightly. Also to the credit of the geologists are such comparatively new "gifts" as the coal basins of Lublin (40 billion tons) in Poland, Slana in Czechoslovakia, Tatabanya in Hungary and many others.

However, we cannot, of course, count on this "moneybox" being perpetually replenished. Moreover the extraction of traditional energy resources is becoming increasingly expensive. How can the problem be resolved?

The first solution lies in the broad development of nuclear energy. Combined with a number of other scientifically substantiated directions, it forms the essence of the long-term targeted program for cooperation between the CEMA countries in the sphere of energy, fuel and raw materials approved at last year's 32d CEMA session.

Its elaboration was dictated by two main factors: The need to insure for the future a reliable energy base for the developing socialist economy and the desire to overcome the negative consequences of the unfavorable circumstances which have arisen on the world fuel and raw materials market. This last point is particularly important for the European CEMA countries, whose own reserves of fuel and raw materials are limited.

The program provides for building nuclear power stations with a total capacity of about 37 million kilowatts in the European CEMA countries, and also in Cuba. And two more such stations with a capacity of 4 million kilowatts each will be constructed in the USSR especially to supply energy to the fraternal countries.

The fulfillment of this section of the long-term targeted cooperation problem will be insured by means of large-scale, multifaceted cooperation in the production of equipment. An appropriate agreement, which will make it possible ultimately to increase by more than one-third the present electricity potential of the European CEMA countries and Cuba, was signed in Moscow in late June.

Another important direction in the program is that of increasing extraction and improving utilization of solid fuel. This is a major reserve for the European socialist countries, and they are making increasing efforts to exploit it to the full. Thus at the last CEMA session Willi Stoph, head of the GDR delegation and chairman of the GDR Council of Ministers, reported the GDR Government's intention of allocating significant resources for the wider use of brown coal. The economical expenditure of fuel must be promoted by measures aimed at increasing the efficiency of equipment at the most widespread power stations--thermal power stations, particularly by increasing the capacity of power units. In the USSR, for instance, units of 800-1200 kilowatts each will be installed.

At the same time it is proposed to restrict the use of oil as fuel. Oil and gas must be more comprehensively processed. This is being done, in particular, in the interests of more fully satisfying the socialist community countries' requirements for motor fuel.

The program also gives new impetus to the further development of joint electricity systems for the fraternal states. In the long term this will make it possible to create the world's most powerful energy system, stretching from the shores of the Pacific to central Europe.

The implementation of these plans will mean a major new step forward in the cause of creating a material base for socialism and communism. Today and in future the socialist countries can build a new society without fear of an "energy famine."

CSO: 5100

## INTERNATIONAL AFFAIRS

### EC ENERGY COMMISSIONER DISCUSSES URANIUM ACQUISITION

Cologne Deutschhlandfunk Network in German to East and West Germany 0550 GMT  
19 Sep 79 DW

[Correspondent Elsner interview with Guido Brunner, EC Commission member responsible for science, education and technology, apparently in Brussels--recorded]

[Text] [Question] What we propose to discuss is the European nuclear community or, to be more specific, the procurement of nuclear fuel. What transpired yesterday in this respect in connection with the EC foreign minister conference?

[Answer] After all of 2 years the European Community will have a mandate for negotiations to conclude an agreement with Australia. This is highly important. Huge uranium deposits are located in Australia. We need this uranium particularly now when we have supply difficulties in other fields and above all face difficulties with the oil price. In the next 10 years it will be necessary to build about 14 nuclear reactors in Europe each year if we wish to cut down on the consumption of oil.

[Question] We heard yesterday that France offered resistance. So far France has interpreted the Euratom Treaty differently, insisting that it also affected national security. Has France now changed its mind?

[Answer] France said yesterday that it does not intend to soften the cohesion of Euratom, but rather that it wants to strengthen it. This decision on negotiations with Australia testifies to that. Besides, yesterday France was prepared to grant the Community the authorization to represent the interests of all nine members states at the convention in Vienna on the safety of nuclear installations, considering this, too, a step in the right direction. Both these developments taken together underscore the European Community's capability of taking action externally and they strengthen our position with respect to energy supply.

[Question] Perhaps you might explain this briefly: Formerly France had objected or voiced reservations to a mandate for this Euratom agency which, by the wish of the Community, was to handle the procurement of uranium alone.

[Answer] Yes, there was an initial discussion on that yesterday. It is a fact that practice with regard to the uranium supply has deviated in the past few years from what had been originally envisaged in the agreements. Now the market is playing a far greater role. Originally the agreements provided for a solution involving a considerable lot of dirigisme. We must now bring all this into line. We had an initial discussion yesterday in a good climate. Now a working group will be appointed which will advise the commission as to the preparation of a statement on these French proposals.

[Question] One more question to make it clear. Are you also of the opinion that the Euratom Treaty has been overtaken by developments in the energy sector, so to speak?

[Answer] In some sectors practice has experienced a deviation with regard to the law, with regard to what had been planned originally. The other parts of the Euratom Treaty are of great importance--particularly as regards foreign relations and research installations. Euratom's significance with regard to foreign relations was stressed once again yesterday. That was a good day for Euratom.

[Question] In case I missed it: What is the approach to negotiations with the United States? Was an opinion formed on this, too?

[Answer] We did not discuss details yesterday, but there are no differences of opinion in this respect. The negotiations with the United States will continue routinely. Euratom concluded an agreement with the United States some years ago. Euratom, that is the European Community, also succeeded in concluding a supply agreement with Canada at Christmas 1977.

[Question] So far the member countries have discussed energy supply very much under national aspects. This morning talks by top representatives with the federal chancellor came to an end: They dealt also with the energy issue. Do you believe that what happened yesterday in Brussels will be a signal that will help us to learn from Brussels how the supply of energy will proceed?

[Answer] What happened yesterday will not be a general cure. But it will be an important building block aimed at diversifying energy supply in Europe. In other words, it is aimed at cutting down supply risks by exploiting new and more sources.

[Question] Yes or no to nuclear energy is being discussed everywhere, also in the Federal Republic. Must one conclude that Brussels does not want to renounce nuclear energy?

[Answer] Brussels does not want to renounce nuclear energy because under present conditions one cannot renounce nuclear energy. The whole Euratom treaty is aimed at the promotion and development of the nuclear industry.

CSO: 5100



## BRIEFS

NUCLEAR EQUIPMENT ENTERPRISE COMMISSIONED--The new nuclear equipment works (Polon) has been commissioned in Zielona Gora. This is another enterprise of this kind in the city, beside the nuclear equipment servicing works Interatom instrument. Outside the Soviet Union the (Polon) works will be the only one in CEMA producing equipment for controlling radiation in nuclear power stations. The complicated equipment is produced first of all for the Polish nuclear power station under construction in Zarnowiec and will also be produced for other socialist countries. At present the commissioning process is still in progress but the works is already producing many subassemblies of the supplementary automatic equipment for nuclear power stations. Also, the intensive training of the workforce is taking place among others in the enterprises in the Soviet Union. [Text] [Warsaw Domestic Television Service in Polish 1420 GMT 14 Sep 79 LD]

CSO: 5100

## YUGOSLAVIA

### CROATIAN ENERGY STUDY URGES BUILDING OF NUCLEAR POWER PLANTS

#### Necessity To Build Plants

Zagreb Domestic Service in Serbo-Croatian 1800 GMT 4 Sep 79 LD

[Text] In order to satisfy domestic energy needs until the year 2000, amid the world energy crisis and insufficient domestic sources of energy, in addition to using coal reserves and the all available river potential it is also necessary to build nuclear power plants in the vicinity of large consumption centers away from coal basins. This is the conclusion of a study compiled by energy experts which was presented at a press conference today by representatives of the Commission for Nuclear Energy of the Croat Assembly's Executive Council and the Association of Electric Power Enterprises of Croatia as well as the Rudjer Boskovic Institute in Zagreb.

The examination of energy needs until 2000 has shown that the utilization of untapped river potentials and coal in Croatia will cover only 18 percent of electric energy needs, while the remaining 82 percent should be insured from thermal power plants fueled by coal in other republics and from nuclear power plants.

A decision on constructing a second nuclear power plant is to be reached this year. This plant, after the first nuclear power plant under construction in Krsko, would be a joint venture by Slovenia and Croatia. The location of this plant, which will be built on Croatian territory, has not yet been determined. According to one proposal by the electric power industry this location would be Prevlaka, near Dugo Selo, not far from Zagreb. The final decision on the location, however, will be adopted only by the assemblies of the associations of electric power enterprises of Croatia and the republican self-managing interest community of electric energy consumers. This power plant should be the first in a series of six nuclear power plants being planned in Yugoslavia. According to the studies compiled by the Institute for Electric Energy in Zagreb, the second power plant is to be in operation by 1990.

#### Further on Power Plant Construction

LD051440 Belgrade TANJUG in English 1336 GMT 5 Sep 79 LD

[Text] Zagreb, September 5 (TANJUG)--Just over a year before the opening of the first Yugoslav nuclear power plant, plans have been made for the construction of four more nuclear power plants to be built in the Yugoslav Constituent Republic of Croatia.

Although the Croatian Association of Electric Power Enterprises has not yet given a final decision, the first of the new plants in Yugoslavia will probably be built near the village of Dugo Selo, on the banks of the Sava, downstream from Zagreb.

The population of Dugo Selo has agreed in principle with the construction of the power plant near the village. The initial plan that the plant be built on the island of Vir has been rejected because of the protests from the local population.

Yugoslavia's first nuclear power plant, a joint venture by Croatia and Slovenia, has been under construction for two years in Krsko, Constituent Republic of Slovenia. The equipment for the plant has been supplied by "Westinghouse" of the USA. The plant is scheduled to open early in 1981.

The proposed building of the four nuclear power plants is explained in Croatia by the increasing energy requirements. In some twenty years, the Croatian Association of Electric Power Enterprises explains, all the hydropower potential in the republic will have been exhausted, while there are coal reserves for only 30 years. With the four new nuclear power plants (to be completed in some twenty years) one-third of the electric energy in Croatia will come from nuclear sources.

In the other republics of Yugoslavia there are no precise plans for nuclear power station construction. Serbia, Yugoslavia's largest constituent republic, has not fully exhausted its hydropower and there are coal reserves for many decades to come.

CSO: 5100

## INTER-AMERICAN AFFAIRS

### ARGENTINA AHEAD OF BRAZIL IN NUCLEAR DEVELOPMENT

FY110304 Buenos Aires Domestic Service in Spanish 2000 GMT 10 Sep 79 PY

[Text] Carlos Castro Madero, chairman of the National Atomic Energy Commission (CNEA) asserted that Argentina is ahead of Brazil in nuclear development. He declined to say whether Argentina's technological progress is 10 years ahead of Brazil, as was stated by a Brazilian technician, terming this a subjective estimate. Castro Madero was referring to statements made by Brazilian technician Jose Leite Lopez and stated that there is no way of measuring these differences but did confirm that Argentina is ahead of Brazil.

This can be proven by the fact that Argentina has had a nuclear plant in operation since 1974 and that Brazil has not yet put its Angra dos Reis nuclear plant into operation. Argentina also has a second plant under construction and has already approved a nuclear plant, including installation, which will have complete control of the nuclear fuel cycle, which is something Brazil hopes to have but will take some time to obtain.

He added that Brazil expedites the training of human resources but that Argentina has been training them for 30 years, which gives us a certain advantage regarding progress. We have also managed to concentrate everything regarding the country's nuclear energy needs in the CNEA.

CSO: 5100

ARGENTINA

OUTAGE AT NUCLEAR POWERPLANT EXPLAINED

Buenos Aires TELAM in Spanish 1215 GMT 13 Sep 79 PY

[Text] Buenos Aires, 13 Sep (TELAM)—In view of the outage at the Atucha Nuclear Powerplant, National Atomic Energy Commission [CNEA] chairman Carlos Castro Madero stated here today that although the final decision is up to the energy secretariat, he believes that the outage would not lead to power cuts because the current power supply is good. He said: "So much so that on Sunday we are asked to reduce the output of Atucha."

CNEA's chairman also explained that Atucha has a small hydraulic turbine for emergencies and that this turbine has a water reservoir where the water which moves the turbine is stored. He explained that "due to electronic problems the water level indicator of the reservoir showed zero, indicating that the reservoir was dry. Naturally, this led to the stoppage of the plant."

Admiral Castro Madero offered assurances that the mishap was a minor one and of no significance, but the plant's safety devices are very sensible and their immediate action unfortunately paralyzed Atucha.

Further on, the official indicated that the powerplant would be back in operation within a week or 10 days. He explained that this delay is caused by the fact that the shutting down of the plant meant stopping the main pumps, and when tests were run to put them back into operation, one of the pumps exhibited problems which require an inspection.

Admiral Castro Madero made these remarks during an interview granted to the radio program "Ford Noticias" which is broadcast by Radio Belgrano.

CSO: 5100

'LA NACION' HAILS ARGENTINE NUCLEAR POLICY AS 'INTELLIGENT'

Buenos Aires LA NACION in Spanish 14 Sep 79 p 8 PY

[Editorial: "Decisionmaking Power"]

[Text] When in 1967 Argentina finally established its nuclear objectives and outlined the policies aimed at attaining them, it took a step of unimagined importance for its decisionmaking power in the currently controversial field of nuclear energy.

Now, over a decade after that decision was made, when our country has acquired the status of Latin American leader in the peaceful use of this modern energy source, it is necessary--as was stated by the chairman of the National Atomic Energy Commission--for our next nuclear powerplants to use locally produced heavy water. In this way the program not only will be free from the ups and downs of the policy which the great powers or the owners of nuclear technology may want to apply, but will also sever any sort of dependency on the supply of this vital element.

Argentina has been acting intelligently in this regard, we could even say that it was exhibited more than its usual quota of intelligence because it managed to concentrate its scientists and technicians, without bombastic or pompous announcements, and engage them in development projects through which it obtained, within a short time, the only operating nuclear plant in Latin America while another one is being built. Furthermore, Argentina is prepared to install a third powerplant and its own heavy water plant,

We all remember the pressures which our country experienced under the pretext that the development of nuclear energy allows it to be used for military purposes. These pressures are recent and still fresh in our minds.

If this was what we had in mind, it would have been implemented by now, since the building of an atomic bomb is nowadays so easy--relatively speaking--that even a U. S. university student wrote his dissertation on the methods which should be followed to build a bomb, and this paper was widely publicized throughout that country--so much so that it forced the government to take a hand in the matter to prevent the implementation of such a possibility in this confused world of ours.

Thus, it is unacceptable that under the pretext that we could manufacture an atomic bomb on the basis of the technology which we have developed, an attempt could be made to curtail our access to an energy source which is so necessary to power our development. Our growth in the field of nuclear energy is also allowing us to export know-how and technology. Such is the case of the contract we have signed with Peru. But it also helps us to



open the doors of these projects to national industries. This national participation was 40 percent in Atucha, it will be 50 percent in Embalse, and in the case of Atucha II, we must recall that the system of "turnkey" contracts has been abandoned to allow the country's specialized organization to take over the responsibility for building this plant.

The advanced status of the heavy water plant project and the imminent dedication of a uranium processing plant in Sierra Pintada--the area where half of our known uranium reserves is located--will enable us to have, within a short time, all the basic elements necessary for the production of nuclear energy by the method we had chosen in due time. Our plan is sufficiently realistic to provide us with six operating nuclear powerplants by the end of this century, since this is in line with our possibilities.

The political aspect of this issue is equally well-established and has the advantage of having remained coherent throughout the years. Everything indicates that this will not change. Thus, the course plotted is highly promising and should not be reversed under any circumstances.

CSO: 5100

## BRAZIL

### PHYSICIST DISSATISFIED WITH PROGRESS OF NUCLEAR PROGRAM

#### Argentina Ahead of Brazil

Rio de Janeiro O GLOBO in Portuguese 10 Sep 79 p 15 PY

[Excerpts] Sao Paulo (O GLOBO)--Despite the fact that Brazil is more advanced than Argentina in the field of pure nuclear physics research, Argentina is ahead in terms of its nuclear program. On confirming this, physicist Jose Goldenberg stated, however, that "there are unfortunately serious doubts as to whether the nuclear agreement with Germany will help Brazil overcome its backward position."

When the agreement with Germany was signed in 1974, it was expected that it would help overcome this situation. In fact, many scientists then supported our association with the Germans. Later it became clear, however, that we would not fulfill our dreams.

He said: Ten years ago, Brazil was clearly ahead of Argentina in nuclear physics and in other areas on which nuclear advancement is based. Thus, Brazil had every chance to maintain this leadership. Today, we are still ahead in the purely scientific field of research. Argentina is only ahead in terms of its nuclear program.

Professor Goldenberg made this comment in response to a statement by physicist Jose Leite Lopes--in an interview published last Sunday by FOLHA DE SAO PAULO--that Argentina is 10 years ahead of Brazil in the nuclear field because "it followed a different policy, of calm development, by bringing together its experts and researchers."

Goldenberg noted, however, that it is difficult to draw a comparison. "Some draw a comparison based on the number of nuclear reactors or laboratories. What Professor Leite did was compare each country's own ability to plan and build nuclear reactors, which is the way experts and engineers view the question."

#### Superpower Interference

PY140238 Rio de Janeiro JORNAL DO BRASIL in Portuguese 13 Sep 79 p 24 PY

[Excerpts] Brasilia--Paulo Nogueira Batista, president of the Brazilian Nuclear Corporation [NUCLEBRAS] pointedly accused the United States and the Soviet Union of continuing to stimulate an organized campaign both through the press and scientific means against the Brazilian-PRO nuclear agreement. He made this accusation at a secret session held on 5 September by the Senate committee charged with investigating the nuclear program, congressional sources who attended the secret hearing revealed yesterday.

The NUCLEBRAS president told the senators that the United States and the Soviet Union seek to prevent, through every possible means, the dissemination of nuclear technology. They believe that nuclear energy, if monopolized by a few countries, will become in the future a political weapon equivalent to what petroleum is today.

He charged that the U.S. campaign is coordinated by the State Department through the embassy, consulates and other means, while the Soviet campaign is coordinated through the Brazilian Communist Party. He said Luiz Carlos Prestes has given precise orders to party members to unleash this campaign, which is conducted through the press and dissident scientists.

Congressional sources noted yesterday that Nogueira Batista's hearing should not have been secret. They believe that had the hearing been open to the press, it would have had a very positive impact for the agreement. [paragraph continues]

"I cannot understand being afraid to openly criticize the United States," said a senator who attended the hearing. "This can be justified only if the criticism is not based on specific evidence, which could cause a diplomatic incident."

Another issue discussed in secret by the NUCLEBRAS president, allegedly because national interest is involved, was the possibility for NUCLEBRAS to export nuclear components to Argentina, Venezuela and other Latin American countries based on the Brazilian-FRG nuclear agreement. Deputy Horacio Ortiz [Brazilian Democratic Movement--Sao Paulo], who attended the secret session invited by the MDB senators, told Nogueira Batista that, as far as he knows, "Brazil cannot even sell bicycles to Argentina, much less nuclear plants." Senator Dirceu Cardoso also told Nogueira Batista that if the Argentine Government buys nuclear components from Brazil, "the entire Argentine people would be so unhappy that they would all commit suicide."

CSO: 5100

NUCLEBRAS PRESIDENT LAYS BLAME FOR NUCLEAR DISCLOSURE

Classified Document

Buenos Aires LATIN in Spanish 2346 GMT 6 Sep 79 PY

[Article by Javier Zaballos]

[Excerpt] Brasilia, 6 Sep (LATIN)--In an apparent reference to the United States, Brazilian Nuclear Corporations [NUCLEBRAS] President Nogueira Batista yesterday accused countries which lost the Brazilian nuclear market of having promoted the disclosure of a classified document, thus "damaging" Brazil's interests in the Latin American nuclear market.

The United States spearheaded the Brazilian nuclear program through the Westinghouse Company, which supplied the first nuclear plant, known as Angra 1. After the signing of the Brazilian-FRG nuclear agreement in 1975, the United States lost the opportunity to further participate in the Brazilian nuclear program.

At a press conference held this afternoon in the Presidential Palace, Batista said that "the damage caused by the disclosure of the shareholders' agreement of NUCLEN has to be minimized now."

Asked who would be interested in the publication of the agreement signed between NUCLEBRAS and the Kraftwerk Union, Batista replied: "The countries which lost the opportunity to export nuclear equipment to Brazil and are afraid of Brazil's competition in the Latin American market in the near future."

Nuclear Agreement Secrecy

PY041350 Sao Paulo Radio Bandeirantes Network in Portuguese 1000 GMT 4 Sep 79 PY

[Interview with Social Communications Minister Said Farhat by unidentified Radio Bandeirantes Network reporter--recorded; place, date not given]

[Text] [Question] Minister Farhat, is the nuclear energy issue the reason for the secrecy surrounding the Brazilian-FRG nuclear agreement?

[Answer] The contract between shareholders of NUCLEBRAS Engineering, Inc and the Kraftwerk Union is a secret document, and there is specific legislation regarding the publication of secret documents, regardless of the subject involved. That nuclear energy happens to be the subject involved in this case is a mere accident. The most important factor here is the publication of a secret document.

[Question] Does that mean, then, that if the newspaper GAZETA MERCANTIL had not published part of the text of the document, it would have never reached the public?

[Answer] Your question can initially be answered with a yes. If it had not been published, then it would have never been published, that is true.

[Question] Why publish it now, then, if it had to be kept secret?

[Answer] I think your question concerns a situation in which one can never be certain. If secrecy had been criticized before, your question may now involve criticism of the publication of the document. Are you asking me why, if it wasn't published before, is it being published now?

[Question] No. My question is based on your answer. The question would be, then, why wasn't the document published before?

[Answer] Because of the secret nature of the document, and it is a secret document because it involves the interests of two companies. In certain sectors caution is a rather routine and necessary measure.

CSO: 5100

ECUADOR

ATOMIC ENERGY COMMISSION EXPLAINS DEVELOPMENT PROGRAM

PA060337 Quito Voz de los Andes in Spanish 2350 GMT 5 Sep 79 PA

[Text] The Ecuadorean Atomic Energy Commission has prepared a development program which includes everything related with the country's energy resources, installations, research work and proposals for the solution of problems faced in this field, Fausto Munoz, executive director of the commission, has reported. He stressed that the most important activity deals with basic biology to provide solutions to agricultural problems. A coordinated scientific program will be implemented to help the country's industry. For this reason, closer ties with the universities, polytechnic schools and state institutions have been established.

CSO: 5100



## VENEZUELA

### OFFICIAL PREDICTS NUCLEAR POWERPLANTS BY 1990

PA311429 Madrid EFE in Spanish 0202 GMT 30 Aug 79 PA

[By Miguel Gil]

[Text] Caracas, 29 Aug (EFE)--Venezuela, Latin America's biggest oil producer, is currently preparing to include nuclear energy in its industrial development program.

Lt Col Juan Antonio Torres, executive secretary of the National Council for Development of the Nuclear Industry, explained to this agency that all alternatives connected with the introduction of nuclear energy at the industrial level are being considered. According to the military officer, the possibility of incorporating nuclear energy into the various programs for generating electricity has been under study in Venezuela since 1965. The country's only experimental reactor is installed at the Venezuelan Institute of Scientific Research (IVIC).

According to Torres, the initial programs have advanced to the point where Venezuela will be capable of utilizing nuclear energy in its electrical complexes by 1990.

In the area of medicine, nuclear energy is no mystery in Venezuela, and the country's principal universities have modern radiation equipment.

The National Council for Development of the Nuclear Industry was created in 1975. Since then, civilians and military have been working together to formulate strategies for the peaceful use of the atom. As a complement to this initial phase, 50 students are currently working toward their graduate degrees in nuclear development in universities in Europe and the United States. According to Torres, the personnel training abroad will help hasten Venezuela's plans for the effective incorporation of the nuclear industry into national development programs.

Regarding Brazil's and Argentina's activities in this field, he explained that these countries have already gone from the experimental to the industrial stage. He stressed that each country has its own energy problems and must act to meet them, rather than follow foreign examples.

Concerning the possibility that the peaceful use of nuclear energy might be diverted to military purposes in Latin America, Torres said this is out of the question because of international treaties banning the manufacture of atomic weapons in Latin America. Furthermore, he stressed, those countries that receive the cooperation of other nations for the peaceful use of nuclear energy commit themselves strictly not to divert the programs' objectives.

He referred to the accident a few months ago in a U.S. nuclear plant, saying this has served to bring about a thorough review of industrial safety in this type of plant. He added that in Latin America a radioactive leak similar to the one that occurred in the United States would be difficult because nuclear energy is controlled by the governments rather than by private companies.

He concluded by indicating that the use of nuclear energy in Venezuela is now feasible because research has resulted in the need to gradually incorporate new alternatives in the production of electricity, and the most feasible alternative is the atom.

CSO: 5100

## NUCLEAR POWERPLANTS TO AUGMENT SEARCH FOR OIL

LD051900 Moscow TASS in English 1702 GMT 5 Sep 79 LD

[Text] Moscow, September 5, TASS--Petr Neporozhniy, USSR minister of power and electrification, declared that there is no danger of an energy crisis either for the Soviet Union or for the countries of the socialist community as a whole. Petr Neporozhniy made this statement in an interview with the NEW TIMES weekly, in which he spoke on how the USSR is resolving the problem of energy supply. "The long-term course for the planned development in the first place of national resources has proved to be fully effective, the minister said. The Soviet power has started this work since the very first days of its existence. Suffice it to recall the state plan for the electrification of Russia (Goelro). The Soviet power industry was developing without placing any stake on import, on the basis of complex balanced use of the available diverse natural resources. They were explored, studied and developed on a planned basis, without seeking momentary benefits, but with due regard for the longterm interests of our rapidly developing economy and the needs of the countries of the socialist community. In this connection was established an integrated power grid making it possible to manoeuvre the flow of electricity and spend it more economically. Electric power has played and is continuing to play a leading role in our energy balance.

"It would be wrong, however, to think, the minister went on to say, that we have no problems involved in fuel and energy supply. The point is that the main reserves of fuel resources are concentrated in the country's eastern areas, while 80 percent of energy are consumed in the European part of the USSR. Therefore, it is necessary to carry large quantities of fuel over long distances. In our search for oil we are moving farther eastward and northward and its transportation becomes ever more expensive.

On the other hand an indirect impact is felt also of economic upheavals, the energy crisis and inflation in the West, as the economy of the countries of the socialist community is not shut off with an impenetrable wall from the non-socialist world. The socialist countries take into account that the worsening of the world economic situation creates certain problems for them. This concerns, in particular, the preservation of the high-level of oil and oil products consumption, which has been reached, and ensuring a steady growth of power facilities.

"But all of these problems do not change the main thing: Our country is fully self-sufficient in fuel resources. The question is only how to use them even more efficiently, the minister pointed out."

We will further resolve the energy problem comprehensively. Petr Neporozhniy stressed the necessity of creating an energy base in the European part of the USSR. "With this aim, he says, a major programme has been drawn up for construction in that part of the country of atomic power plants so as to bring their aggregate generating capacity to reach 100 million kilowatts in the next few decades. A practical implementation of this programme has been started".

The minister pointed out that "simultaneously with increasing our energy potential, we are taking all measures for a sensible, most rational and economic use of our fuel and energy resources."

CSO: 5100

## ANTINUCLEAR POWER FORCES IN SPD STRENGTHEN POSITION

### Party Congress To Decide

Bonn DIE WELT in German 6 Sep 79 p 1

[Report by "AP/DW/rmc": "This Is How the Left Wants To Stop the SPD"]

[Text] Bonn--In the SPD leadership the opposition is increasing against further expansion of nuclear energy and against the introduction of the new weapons systems considered urgently necessary by the FDP coalition partner.

The Schleswig-Holstein party chairman, Klaus Matthiesen, has drawn the conclusion from the consultations by the SPD executive that there almost certainly will be no majority at the Berlin party congress in December for the proposal of most of the members of the SPD energy committee that the construction of new nuclear power plants should be permitted just as long as there are sufficient intermediate stores to insure safety of nuclear waste.

According to what Matthiesen has told the press, North Rhine-Westphalia Minister-President Johannes Rau and Hermann Heinemann, chairman of the SPD western Westphalian district with the greatest number of members, made it clear in the party executive that they do not consider an expansion of the intermediate store capacities sufficient to allow new nuclear power plants.

In the armament question the SPD leadership is hopeful that the Soviet Union will be ready to cooperate. Its stand is that NATO should introduce and station medium-range nuclear weapons in Western Europe only if talks with Moscow about lessening the Euro-strategic threat should be unsuccessful.

Because of the expensive controls involved, disarmament is not necessarily cheaper than armament. SPD armament expert Alfons Pawelczyk confirmed to correspondents that the Social Democrats were ready in principle "to spend just as much money for the nonintroduction as for the introduction of weapons."

## Party Energy Committee Report

Bonn DIE WELT in German 6 Sep 79 p 2

[Report by Heinz Heck: "Ehmke Committee Persists in Nuclear Power Option"]

[Text] Bonn--All but 1 of the 14 members of the SPD energy committee have adhered to the decision of the 1977 party congress in Hamburg not to forgo nuclear energy and to keep open the option of its use. The chairman of the committee, Horst Ehmke, stated yesterday on the occasion of the submission of its intermediate report in Bonn that only Michael Mueller (Young Socialists) had advocated the immediate forgoing of nuclear energy.

Ehmke did not attempt, however, to play down the differences of opinion among the remaining members of the committee. Rather, he stressed them, primarily attributing to them the difficulties which had arisen in the safety question since the 1977 party congress. At the same time he expressed the hope that by the time of the party congress in Berlin a proposal would be developed after all which would be supported by the great majority of delegates. The SPD, he said, is conducting the debate about nuclear energy "as a representative of our society" because these questions must "not be left to the backrooms of the economy and the state." The CDU/CSU, Ehmke charged, is taking an insupportable stand. While it is making nuclear energy a golden calf, Bavaria and Lower Saxony do not go along when it comes to the question of safety as far as nuclear waste is concerned. Ehmke indicated a location other than Gorleben was feasible ("either Gorleben again, or wherever"). Apparently the majority of committee members spoke out for not delaying the construction of new nuclear power plants until the granting of the first partial construction license for an integrated atomic-waste center. They are satisfied until then that safety can be insured "through binding contracts" or "by building adequate intermediate-store capacities."

Even without a formal vote, a minority probably supported the following position: "The mere construction of intermediary stores without safe final storage cannot lead to sufficient safety policy security to warrant the construction of new nuclear power plants as far as safety policy is concerned. The historical mortgage of the unsolved safety question can be paid off only if a permanently safe final storage is realized." In the view of this group, a reconversion and/or processing of burned fuel elements for final storage is not feasible in the FRG in the foreseeable future, and the proposal of the German Company for the Reconversion of Nuclear Fuel (DKW) to authorize the project in Gorleben planned by it--in agreement with the SPD in the Lower Saxon Landtag--has to be "rejected for safety reasons."



## Local Leaders Express Doubts

Bonn DIE WELT in German 6 Sep 79 p 2

[Report by "H.H.": "Safety Question Determines Future of Nuclear Energy"]

[Text] Bonn--When it comes to the question of the safety of nuclear waste, it is not only in the SPD that opinions differ. This question also occupies the federal and Land Governments--particularly ever since Lower Saxon Minister-President Ernst Albrecht has refused a license for the construction of a reconversion plant. Since presumably it will not be known for sure before about 1990 whether the salt dome around Gorleben is suited for final storage, some intermediate store capacity for fuel elements will probably be needed as well.

Federal Chancellor Helmut Schmidt has spoken of the need for up to eight intermediate stores--in other words, one each in each Land other than the city Laender. In the committee of the state secretaries concerned, under the chairmanship of Guenther Hartkopf of the Ministry of the Interior, however, this position has been adjusted. The committee, which is to work out the draft of a proposal for the meetings of heads of government of the nation and the Laender on 28 September, now regards only three intermediate stores as necessary. The crucial question is: Where are these to be built? The reservations interposed in the meantime, for instance, by the North Rhine-Westphalian government as far as Ahaus is concerned amount to a retreat. Minister-President Franz Josef Strauss even holds the view that in the Free State of Bavaria the compact stores [Kompaktlager] at the nuclear power plants are sufficient. Such a solution, however, is not regarded as "court-proof" in Bonn.

## Effect of Construction Stop

Bonn DIE WELT in German 6 Sep 79 p 10

[Article by Heinz Heck on Power Supply: "Bonn Says Nuclear Power Indispensable--What Will Happen if There is a 4-Year Nuclear Power Plant Construction Stop?"]

[Text] Bonn--A 4-year construction stop for nuclear power plants would have a "considerable effect" on the power industry and supply and, beyond that, on productivity of German nuclear power plant production and, as a result, on the economy as a whole.

Furthermore, said State Secretary Dieter von Wuerzen in reply to a question by CDU Bundestag Deputy Egon Susset, Heilbronn, such a construction stop would also force a substantially greater use of existing oil power plants than at present. The consequent substantially higher consumption of fuel oil could not be reconciled with the federal government policy aimed at supplanting petroleum or with the obligations entered into in Tokyo.

As late in statement on energy policy on 4 July, the federal chancellor had spoken in favor of a further decrease in the use of oil in the production of power. (In 1978 the share of oil in public supply of power had shrunk to 6 percent.)

Besides, a construction stop would further increase the regional differences in the price of electricity. Bottlenecks in supply would be likely particularly in southern Germany. In such a case, nuclear power plant capacities would remain at 9,000 megawatts. At present, the state secretary stated, nine nuclear power plants with a total of 9,900 megawatts are under construction.

As has been learned in addition, the following installations are involved: Grafenrheinfeld I in Bavaria (inauguration planned for 1980); Muehlheim-Kaerlich in Rhineland-Palatinate and Gundremmingen B in Bavaria (both 1982); Philippsburg II in Baden-Wuerttemberg, Gundremmingen C, Untrop Schmehausen (high-temperature reactor) in North Rhine-Westphalia (all three 1983); Grohnde in Lower Saxony and Kalkar (fast breeder) in North Rhine-Westphalia (both 1984).

Disregarding the two demonstration power plants of the advanced reactor line (high-temperature reactor and fast breeder), the seven other plants each have a capacity of 1,300 megawatts. Two further plants--Brokdorf and Wyhl) have been stopped by court action at present. Word from Wuerzen indicates that at present projects of more than 10,000 megawatts are awaiting licensing and further projects are in the industrial planning stage.

As for costs, a construction stop for nuclear power plants would cause burdens in a twofold respect. For one thing, costs would have to be covered of installations being constructed, to an amount of several billion deutsche marks. For another, excess costs, "likewise in the billions," arising from the use of hard coal, compared with nuclear energy, for the production of power would be incurred.

Without further nuclear power plants, already by the mid-1980's base load power plants with 10,000 megawatts would have to be inaugurated just to offset the installations now being built. A construction stop would mean moreover that work on the further projects would cease at least for this period of 4 years, causing even greater demand over the longer term.

Already in regard to planning and construction times (conventional power plants need up to 6 years to be built), a large part could actually no longer be replaced on schedule, because the conventional power plants that would have to be built in replacement would virtually have to start being built at once. Since the possibilities of greater use of brown coal, oil, gas and hydroelectric power are limited, hard coal would have to be considered primarily, and there projects with 7,400 megawatts are already being built.

To cover the needs for fuel, about 20 million tons of hard coal a year would have to be made available for this on a short-term basis.

## FINLAND

### NUCLEAR POWERPLANT ACCIDENT A POSSIBILITY

LD112026 Helsinki Domestic Service in Finnish 1530 GMT 11 Sep 79 LD

[Text] Preparation for any possible accident situation is still being investigated at the Loviisa nuclear powerplant. The latest security checks on the Loviisa I powerplant have shown that a possible fault in the powerplant's cooling circuit could cause a serious accident, for radioactive radiation would leak from the reactor. Security at the Loviisa powerplant has been investigated on the basis of new aspects which appeared in the Harrisburg nuclear powerplant accident in the United States last spring. The Institute of Radiation Protection says that according to the investigations which are being completed, it seems that as far as the Loviisa powerplant is concerned one cannot yet exclude the risk of an accident.

The information provided by computer runs so far was not available when the powerplant was granted a permit to be charged with fuel, says Chief Inspector Jukka Laaksonen from the Institute of Radiation Protection. According to him, the Loviisa plant may be ordered to be temporarily stopped and repaired if the suspicions are confirmed.

Representatives from Imatran Voima will be leaving on Thursday for Moscow to have talks on the plant's security with the Soviet supplier if the plant. Representatives of the plant and the Institute of Radiation Protection will discuss the situation next Monday.

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## FINLAND

### GOVERNMENT GRANTS LICENSE FOR NUCLEAR POWERPLANT

LD011908 Helsinki Domestic Service in Finnish 1530 GMT 1 Sep 79 LD

[Text] The government has decided to **grant** an operating license for the second Teollisuuden Voima nuclear powerplant in Olkiluoto. The government does not regard as an obstacle to granting the operating and security license the fact that no guarantee has been given within the prescribed time concerning the nuclear waste disposal plan. The decision to grant the operating license was reached at a government session without voting. The SKDL (Finnish People's Democratic League) minister, however, proposed that the license issue should be returned to the Energy Council, since the favorable report was drawn up before the radioactive leakage at Olkiluoto II.

The government today received the report of the Radiation Protection Institute concerning the pipe leakage in the Olkiluoto I nuclear powerplant on Wednesday. Preliminary investigations show that the damage to the water pipe was due to incorrect use. This in its turn was caused by unintelligible instructions. The Radiation Protection Institute will not alter its favorable report concerning the operating license for the Olkiluoto I nuclear powerplant despite the leakage in the first plant.

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MURUROA 'ACCIDENTS' BRING EXPERTS TO SCENE

Paris LE MONDE in French 2-3 Sep 79 p 20

[Text] Papeete (AFP)--The high commissioner of the republic in French Polynesia, Mr Paul Cousseran, announced on Friday 31 August, that a delegation of experts would arrive shortly on the Mururoa atoll to investigate there the accidents that occurred in July: two killed in an explosion and four injured by a "mini-tidal wave" (LE MONDE 26 July and 2 August).

The French Polynesian Territorial Assembly and Deputy Jean Juventin (member of the UDR [French Democratic Union],) have twice (LE MONDE 19-20 and 24 August) demanded the naming of a commission of inquiry.

The delegation of experts will consist of Messrs Pellerin, chief of the Central Service for Protection Against Ionizing Radiations; Sabatier, of the Montpellier University of Science and Technology, and a specialist in hydraulic problems; Mechler, of the University of Paris-VI, a specialist in tectonics and seismology; Dr Jammet, chief of the AEC's [Atomic Energy Commission] Department of Protection; and Mr Teilac, AEC high commissioner.

The Defense Ministry has also invited a delegation of elected officials, to be designated by the Territorial Assembly, to visit the Mururoa atoll.

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GREECE

# MINISTER CONFIRMS EXISTENCE OF EXPLOITABLE URANIUM DEPOSITS

Athens Domestic Service in Greek 1830 GMT 14 Sep 79 AT

[Text] Exploitable uranium deposits, proved to exist in the locality of Marammena of Serrai, are estimated at 1,000 tons and can, therefore, meet the requirements of a nuclear powerplant of 700 to 800 kilowatts for 20 to 25 years. The announcement was made by Minister of Energy and Industry Miltiadhis Evert, who added that signing of the agreement with the American (Embasco) Company, which will undertake the planning of the nuclear plant, is proceeding.

It will be recalled that the deposits at the Marammena section of Serrai were discovered early this year by technicians of the Institute for Geologic and Mineral Research.

Evert also said it is a good omen that there is hydrogen sulphide in the area of Mirtia, Ilia Nome. The minister added that this proves the existence of oil and that drilling will be continued Monday or Tuesday after cessation of operations for damage to the drilling equipment which has now been repaired.

Evert added there is a sufficient quantity of all oil products to meet all of this year's requirements. He clarified that in the case of diesel, where there is an alleged shortage, oil marketing companies were provided with 213,000 tons of oil in early August as compared to 157,000 tons provided during the same month of the previous year.

CSO: 5100



NUCLEAR ENERGY AGREEMENT BETWEEN SPAIN, URUGUAY PUBLISHED

Madrid BOLETIN OFICIAL DEL ESTADO in Spanish 3 Aug 79 pp 18237, 18238

[Text] Ministry of Foreign Affairs

19213 Supplementary agreement for cooperation on atomic energy for peaceful purposes between the government of the Kingdom of Spain and the government of the Oriental Republic of Uruguay, signed in Montevideo on 30 March 1979.

The government of the Kingdom of Spain and the government of the Oriental Republic of Uruguay, in accordance with what was specified in the Basic Agreement on Scientific and Technical Cooperation between the Spanish Government and the government of the Oriental Republic of Uruguay, executed in Madrid, on 29 November 1974;

In view of their common interest in promoting scientific research and technological development in matters of nuclear energy;

Recognizing the advantages of close scientific and technological cooperation between both countries for developing the use of nuclear energy for peaceful purposes, and

Realizing that research and development in the field of nuclear energy require special regulation, adapted to its scientific and technological evolution, which must be reflected in the special features of international cooperation in this matter, agree on the following provisions:

Article I

In accordance with the provisions of this agreement and subject to what is specified in international agreements, laws, regulations and other legal rules in effect in Uruguay and Spain, the contracting parties will cooperate in the field of nuclear research and its applications for peaceful purposes and will facilitate the performance of common work in that field.

## Article II

Execution of cooperation programs and projects adopted by virtue of the present agreement will be entrusted by the contracting parties to the Nuclear Energy Board (JEN) of Spain and to the National Atomic Energy Commission (CNEA) of Uruguay, designated henceforth as JEN and CNEA, respectively, which will determine, by mutual agreement, in each case, the special requirements and procedures that will govern cooperation.

## Article III

1. Cooperation provided will be carried out in the following sectors:

- a. In the field of research, technology, development, planning, construction and utilization of experimental and power reactors.
- b. Basic or applied research associated with peaceful uses of nuclear energy and with the detection and effect of radiation.
- c. Production of isotopes and their applications.
- d. Prospecting for radioactive minerals, their processing and utilization for peaceful purposes.
- e. Other scientific and technological aspects associated with the peaceful use of nuclear energy regarded as mutually advantageous by the contracting parties.

Exchange of information concerning the above-mentioned sectors can take place only for that information that JEN and CNEA can make freely available.

2. Exchange of personnel and information in the sectors mentioned in paragraph 1 of this article will be accomplished by means of the following:

- a. Mutual assistance in training scientific and technical personnel.
- b. Exchange of experts.
- c. Exchange of professors and experts for courses and seminars.
- d. Study scholarships.
- e. Mutual consultations on scientific and technological problems.
- f. Formation of joint working groups to make concrete scientific research and technological development studies.
- g. Exchange of unclassified technical documentation pertaining to the above-mentioned sectors.

#### Article IV

Detailed development of the form of collaboration stipulated in the present agreement is incumbent on the JEN and the CNEA, which may hold meetings of technicians and experts in either country to discuss and draw up programs for application of the present agreement.

If, at the request of either of the parties and within the framework of execution of the cooperation programs and projects stipulated in article II of the present agreement, there should be need for expanding scientific, technological and educational collaboration, it may be accomplished by means of an exchange of letters between the JEN and the CNEA, duly authorized, in each case, by their respective governments.

#### Article V

The parties will make free use of all information exchanged between the JEN and the CNEA, unless the party supplying it has specified restrictions concerning its use or dissemination.

If the information furnished pertains to patents registered in Spain or Uruguay, the terms and conditions for their use or communication to third parties must be governed by currently effective legislation on this matter in both countries.

#### Article VI

The exchange of technicians and teaching personnel stipulated in article III will be determined, in each case, by the JEN and the CNEA jointly, with specification of the periods of residence and the special conditions for each case, both with regard to the mission to be performed and to financing.

#### Article VII

The contracting parties agree to offer study scholarships mutually. The number of these scholarships, their duration and other conditions governing them will be determined jointly by the JEN and the CNEA.

#### Article VIII

The contracting parties will facilitate the mutual supply and sale of nuclear materials and equipment needed for carrying out their development programs in the field of use of nuclear energy for peaceful purposes. These transactions remain subject to legal provisions in force on the matter in Spain and Uruguay.

#### Article IX

Any material supplied by one of the contracting parties to the other or any material derived from the use of the foregoing will be used only for peaceful purposes and will remain available to the contracting party receiving it,

subject always to the legal provisions in force in the respective country and to any international agreements to which each country has subscribed.

#### Article X

The contracting parties agree to cooperate mutually in the development of those joint projects carried out by the JEN and the CNEA within the framework of this agreement, facilitating as much as possible collaboration that may be provided on those projects by other institutions and public or private agencies in the respective countries.

#### Article XI

The representatives of JEN and CNEA are to meet at the request of either of those agencies to examine the evolution of projects and, if appropriate, to draw up recommendations that the contracting parties might consider for better implementation of this agreement.

#### Article XII

1. The present agreement will go in force starting on the date of its signing. It will be valid for 5 years and will be extended indefinitely, tacitly, from year to year, unless one of the contracting parties denounces it in writing, at least 3 months in advance of the date on which the pertinent annual period is to expire.

2. Even though the present agreement may have expired and is no longer in force, projects already started, within its legal framework, will continue to be carried out until their conclusion, with the exception of an explicit contrary decision by the contracting parties.

Done in the city of Montevideo, in two copies with the same content and equally valid, on 30 March 1979.

For the government of the Kingdom of Spain,

Roman Oyarzun Inarra,  
Ambassador Extraordinary and Plenipotentiary of Spain.

For the government of the Oriental Republic of Uruguay,

Adolfo Folle Martinez,  
Minister of Foreign Relations.

The present agreement will go in force on 30 March 1979, date of its signing, pursuant to article XII of said agreement.

This is published for general knowledge.

Madrid, 14 July 1979. The technical secretary general, Juan Antonio Perez-Urruti Maura.

## BRIEFS

NUCLEAR POWER STATION REFUSAL--The town council of Trillo in Guadalajara, which consists of nine members, decided in a secret vote to refuse permission to construct the nuclear power station, which the national energy plan proposes for this area in the Province of Guadalajara. The decision was taken with four votes for, three against and one abstention. The reasons given for refusing the permit were: the inhabitants of Trillo and area were not first consulted, the lack of a serious policy of regional development, it is an attack on a region of undoubted touristic wealth, the fact that only a few will reap the benefits and the national imbalance, resulting from the fact that Guadalajara, which has hardly more than 100,000 inhabitants, will be the province producing the most nuclear energy in Spain. [All figures as heard] [Text] [Madrid Domestic Service in Spanish 0600 GMT 19 Sep 79 LD]

CSO: 5100

SWEDEN

BRIEFS

ALLEGED NUCLEAR PLANT DEFICIENCIES--Four Swedish nuclear powerplants have serious deficiencies owing to swindling which took place during the installation work, NY TID, organ of the Left Party Communist wrote in Stockholm yesterday. The paper says that it received its information from some workers who took part in the installations. The Swedish nuclear powerplant inspection board takes a serious view of the reports. According to the workers who revealed the matter they themselves took part in the swindling when they [words indistinct]. [Text] [Helsinki Domestic Service in Finnish 0600 GMT 14 Sep 79 LD]

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